

WHAT IS CLAIMED IS:

1. A voltage supply device for a vehicle power amplifier having an audio characteristics compensation function, comprising:

5 means for setting the voltage supply device to a first mode when a device power is turned on; and

10 means for setting the voltage supply device to a second mode when the device power is tuned on after setting on/off operation of compensation functions and associated adjustment values in the first mode and turning the power off;

15 wherein the first mode is a mode to supply source voltage only to a unit involved in setting the compensation functions and adjustment values, and the second mode is a mode to supply source voltages to the entire vehicle power amplifier.

20 2. A voltage supply device as defined in Claim 1, further comprising a memory for storing information that determines either the first mode or the second mode when the device power is turned on, and said setting means set the voltage supply device to either the first mode or the second mode based on the information in the memory.

25 3. A voltage supply device as defined in Claim 2, further comprising means for storing the information indicating the first mode in the memory at an initial stage before shipment of the voltage supply device, and means for storing the information indicating the second mode in the memory at the end of the first mode.

30 4. A vehicle power amplifier having an audio characteristics compensation function, comprising:

a memory for storing information which specifies either a first mode or a second mode at power on;

means for storing the information indicating the first mode in the memory before shipment of the vehicle

40052194304

power amplifier;

a voltage supply for supplying source voltages to blocks in the vehicle power amplifier based on the information stored in the memory;

5 means for setting on/off operation of compensation functions and associated adjustment values in the first mode and storing the information indicating the second mode in the memory after the setting, and

10 means for applying a compensation process to input audio signals based on said setting and amplifying the audio signals by a power amplifier unit when the vehicle amplifier is in the second mode;

15 wherein the first mode is a mode to supply the source voltages only to blocks involved in setting the compensation functions and adjustment values, and the second mode is a mode to supply the source voltages to the entire vehicle power amplifier.

5. A vehicle power amplifier as defined in Claim 4, wherein said memory is a non-volatile memory.

20 6. A vehicle power amplifier having an audio characteristics compensation function, comprising:

25 an adjustment and compensation controller for applying the audio characteristics compensation function to an input audio signal, the adjustment and compensation controller including a microcomputer for controlling an overall operation of the vehicle power amplifier;

a voltage supply for supplying source voltages to blocks in the vehicle power amplifier;

30 a memory for storing information which specifies either a first mode or a second mode at power on where the first mode is a mode to supply the source voltages only to blocks involved in setting the compensation functions and adjustment values, and the second mode is

a mode to supply the source voltages to the entire vehicle power amplifier; and

a power amplifier unit for amplifying the audio signal from the adjustment and compensation controller and supplies the resultant audio signal to a speaker;

wherein the microcomputer causes to store the information indicating the first mode in the memory before shipment of the vehicle power amplifier and the information indicating the second mode in the memory after setting on/off operation of compensation functions and associated adjustment values in the first mode.

7. A vehicle power amplifier as defined in Claim 6, wherein said adjustment and compensation controller includes a digital signal processor which applies a compensation process to the audio signals in the second mode based on said setting made in the first mode.

8. A vehicle power amplifier as defined in Claim 6, wherein a procedure for setting the on/off operation of compensation functions and associated adjustment values in the first mode is conducted by connecting a small capacity power source to the vehicle power amplifier before installing the vehicle power amplifier in a vehicle.

9. A vehicle power amplifier as defined in Claim 7, wherein said digital signal processor applies the compensation process to the audio signals in the second mode by connecting a large capacity power source to the vehicle power amplifier after installing the vehicle power amplifier in a vehicle.

10. A vehicle power amplifier as defined in Claim 6, wherein said memory is a non-volatile memory.